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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,526	03/30/2004	Takuma Akagi	204126-9004	6149

7590 09/28/2004  
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401 North Michigan Avenue  
Chicago, IL 60611-4212

EXAMINER

DASTOURI, MEHRDAD

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/813,526

Applicant(s)

AKAGI, TAKUMA

Examiner

Mehrdad Dastouri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/626,646.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/30/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date, \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 21-28 are rejected under the judicially created doctrine of double patenting over Claims 1-12 of U. S. Patent No. 6,738,515 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

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The subject matter recited in Claims 21-28 of the instant application is a broad version and encompasses all limitations of Claims 1-12 of U. S. Patent No. 6,738,515.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 21-23 and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Scanlon (U.S. 5,850,480).

Regarding Claim 21, Scanlon discloses a character string matching apparatus for effecting a process for matching between a first character string, which comprises a plurality of characters as a result of a recognition of characters, and a second character string, which comprises a plurality of characters stored in a dictionary in advance, comprising:

a first table for specifying types of the characters appearing in the first character string and orders of the characters appearing in the first character string (Figure 2, Raw OCR 220; Column 7, Lines 49-59; Figure 3, Raw OCR 320; Column 13, Lines 44-59);

a second table comprising a memory, in which a calculated value of each of the components of various types of second character strings to be matched with respect to the first character string in the direction of the second character string is stored, the

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second table being caused to correspond to the orders of appearance and types of the characters specified by the first table (Figure 2, Selected Lexicon Chair Strings 230; Column 7, Lines 60-67, Column 8, Lines 1-8; Figure 3, Selected Lexicon Character Strings 330; Column 13, Lines 60-67, Column 14, Lines 1-9);

voting means for casting a vote to the second table with respect to each of the characters of the first character string which has been input based on a correspondency of the first table with the second table (Column 4, Lines 18-32; Figure 2, Distance Values 240; Column 8, Lines 9-21; Figure 3, Distance values 340, Column 14, Lines 10-28); and

determining means for determining whether or not the first character string and the second character string are matched based on a result of voting to the second table as a result of the voting by said voting by the voting means executed with respect to all of the characters of the first character string (Figure 4, Selected Lexicon Character Strings 430; Column 23, Lines 24-61; Figures 5A-5E and 6A-6E).

Regarding Claim 22, Scanlon further discloses the character string matching apparatus according to Claim 21, wherein the first character string has recognized characters each having similarity, the second character string includes characters which are registered in a dictionary, and the voting means casts a vote weighted based on the similarity of each of the recognized characters of the first character string (Figures 2-4; Column 7, Lines 49-67, Column 8, Lines 1-8; Column 13, Lines 44-67, Column 14, Lines 1-9).

Regarding Claim 23, Scanlon further discloses the character string matching method according to Claim 22, wherein the voting means does not cast a vote where

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the similarity of each the recognized characters of the first character string is lower than a predetermined level (Figure 5A; Column 8, Lines 62-67, Column 9, Lines 1-18).

With regards to Claim 25, arguments analogous to those presented for Claim 21 are applicable to Claim 25.

With regards to Claim 26, arguments analogous to those presented for Claim 22 are applicable to Claim 26.

With regards to Claim 27, arguments analogous to those presented for Claim 23 are applicable to Claim 27.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scanlon (U.S. 5,850,480) in view of Lopresti et al (U.S. 6,047,093).

Scanlon does not expressly disclose further limitations recited in Claim 24 wherein the first character string includes character candidates each having the priority order, the second character string includes characters which are registered in a dictionary, and the voting means casts votes weighed based on the priority order of the character candidate of the first character string.

Lopresti et al disclose means for enhancing optical character recognition of character strings comprising a first pattern string that is a first character string including

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character candidates each having the priority order, a second pattern string that includes characters which are registered in a dictionary, and a voting means for casting votes weighted based on the priority order of the character candidate of the first character string (Figures 7, 8A and 8B; Column 10, Lines 41-67, Column 11, Lines 1-55).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Scanlon's invention according to the teachings of Lopresti et al to implement further limitations of Claim 24 because it will increase the accuracy of pattern matching system and will expand the versatility of the character string matching system to provide more reliable recognition results.

With regards to Claim 28, arguments analogous to those presented for Claim 24 are applicable to Claim 28.

***Other prior art cited***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,131,102 to Potter;

U.S. Patent 5,963,666 to Fujisaki et al.

***Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehrdad Dastouri whose telephone number is (703) 305-2438. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mehrdad Dastouri  
Primary Examiner  
Art Unit 2623  
September 27, 2004

MEHRDAD DASTOURI  
PRIMARY EXAMINER

